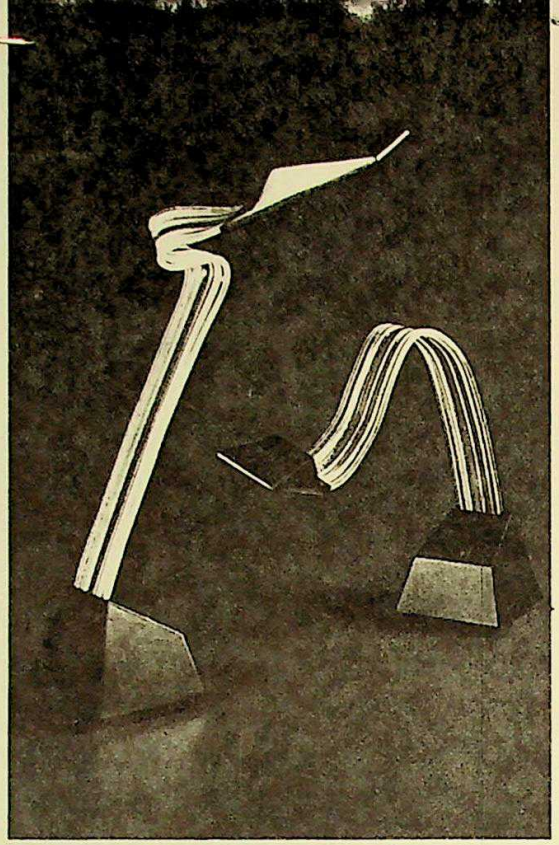
DESIGN 420 PAGE 18

DEC. 1983

D7/325



Electric sculpture
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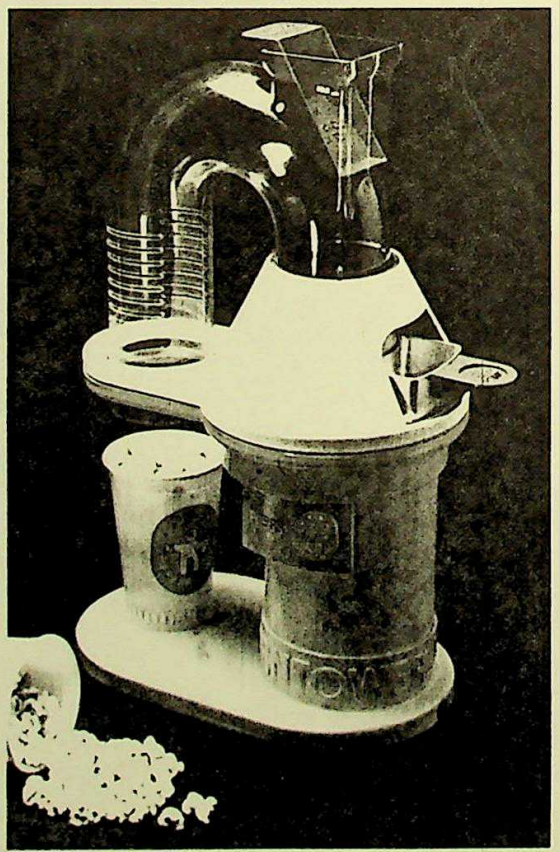
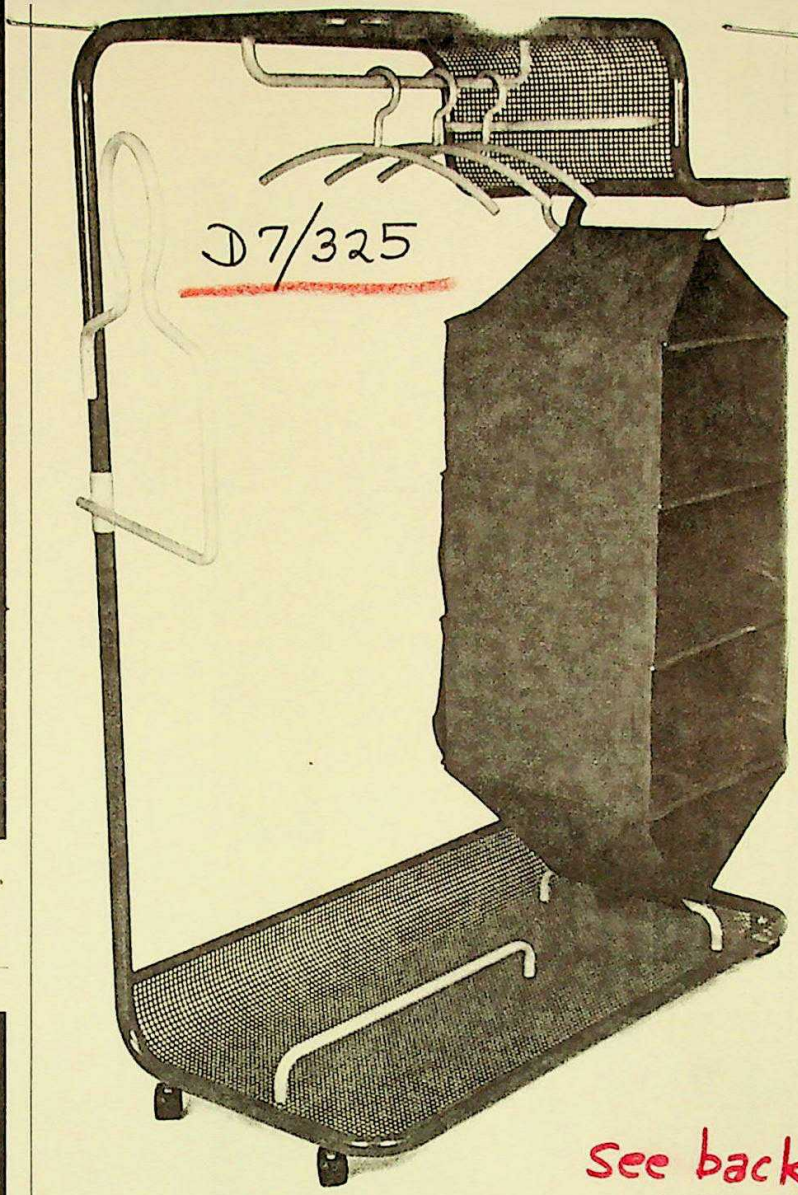


Popcorn producer
This electronic domestic popcorn maker, designed by Paul Goodens as part of his Central School degree show, uses hot air, not oil. Called the Corntower, it works fast and needs little cleaning. Contact Goodens on (01) 584 7155.



See back

Skeletal lines
New British furniture from Cubic Metre, designed by Minale Tattersfield. The tubular steel Skeleton chair range pays close attention to ergonomics and design detailing. It includes simple stackers (right) and office chairs (left) from £40 to £1[illegible]. Batman (top) is an alternative to the wardrobe, price £[illegible]

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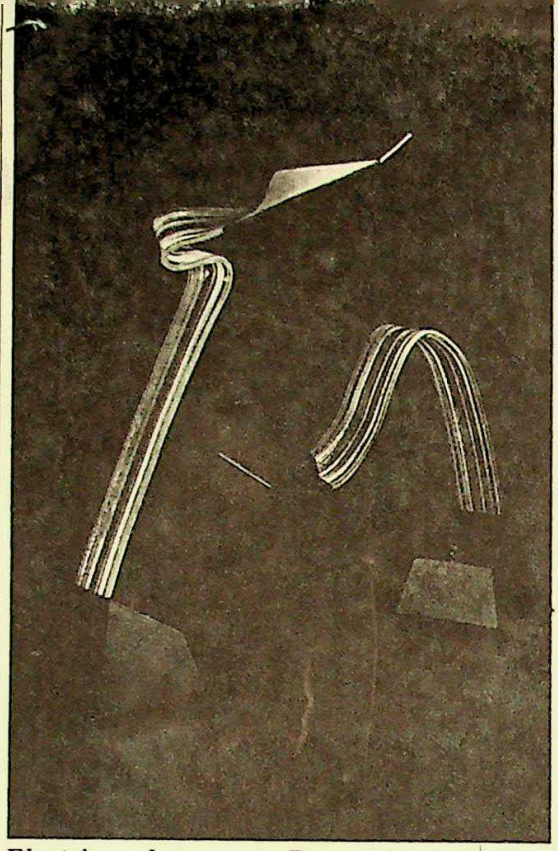
DESIGN 420 PAGE 18

DEC. 1983



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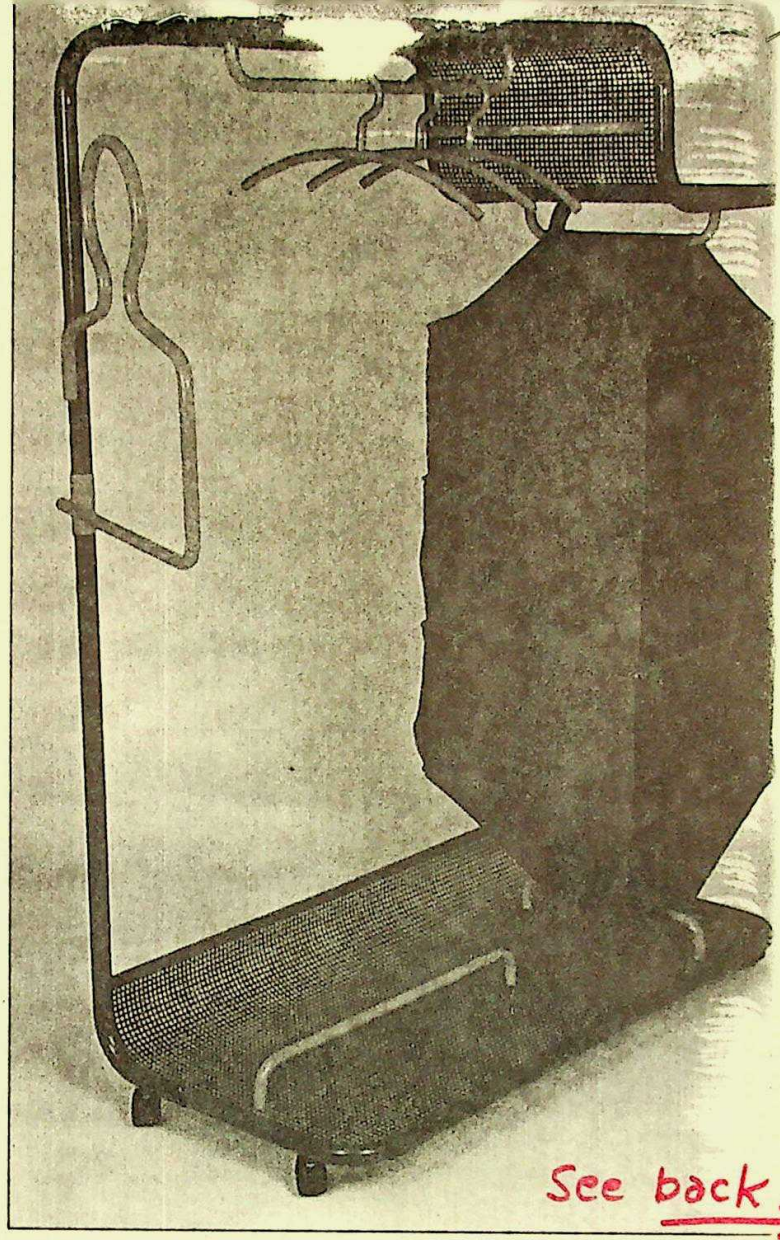
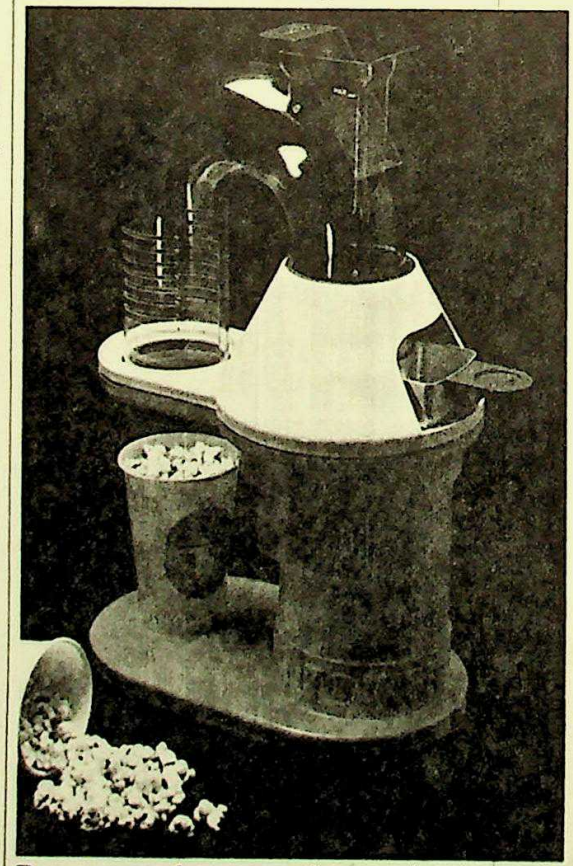


See back



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Skeletal lines
New British furniture from Cubic Metre, designed by Minale Tattersfield. The tubular steel Skeleton chair range pays close attention to ergonomics and design detailing. It includes simple stackers (right) and office chairs (left); f from £40 to £130. T Batman (top) is a st alternative to the wardrobe; price £23

D.7-325

RETAILING HOME FURNISHINGS HFD

JULY 18, 1983

P. 28

NEW FROM PRESTO!

PROBABLY THE BEST CORN POPPER EVER MADE.

It's here! A hot air popper that pops any kind of popcorn...either gourmet or regular brands...with great results everytime.

Watch sales soar this Fall with the new Presto® PopCornNow® Plus gourmet/regular air popper. Your customers will be sold on the way it pops big, plump puffs of corn with hardly any unpopped kernels.

Discover the difference in Presto quality for yourself. The look, feel and performance of a quality appliance...not a toy. Your customers will appreciate the difference.

It just might be the best corn popper ever made. And that's just what you'd expect from Presto.

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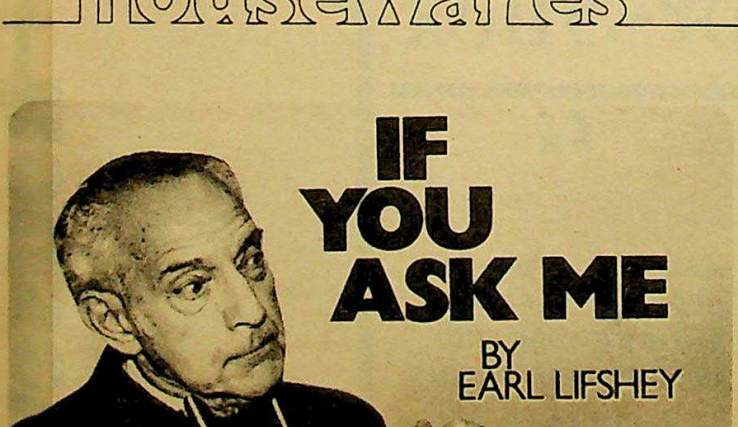
PRESTO®

...innovation to make it first—
quality that makes it last and last®

housewares



IF YOU ASK ME

BY EARL LIFSHEY

(Second of two columns)

Reading — and re-reading — the recent statement of Lasker Meyer, chairman and CEO of Foley's in Houston and Allen Questrom, chairman and CEO of CEO of Rich's, Atlanta, announcing the new all-out offensive policy of Federated Department Stores Inc. against the so-called "off-price retailers," takes one back to the early 1960's.

Those were the days when department stores were still desperately trying to find a way to cope competitively with that new kid on their block, the discounter. In fact when one of the pioneer discounters, Steve Masters, in 1959 at-

Of Tides an

tempted to join t
Retail Merchants A
was bluntly refused
and critical blast.

"It is interesting t
back, "to see the
store — which once
the discount house
mate, fly-by-night, u
tailer — now on
instead . . . In fact
ment store adopts n
of the discount hou
may soon be the d
that is regarded as
method of distributi

There is, of co
pointed out here las
any real difference

APRIL, 1983

(TOP OF PAGE) ↑

UN OMAGGIO PER CHI AMA IL COTTO

pubblipunto firenze © IL FERRONE 1982

APRIL, 1983
"ABITARE 213"
p. 155

RUBRICHE

In 15-20 minuti questo piccolo apparecchio tosta 1 kg di castagne; si usa sulla fiamma viva di un fornello a gas dopo aver avviato il movimento rotatorio di cui si avvale grazie a un motorino a batteria. Con una retina accessoria può tostare caffè e pop corn.
È distribuito dalla **S.I.C.C.**

In 15-20 minutes this little gadget roasts 1 kg of chestnuts; all you have to do is put it on the gas cooker after you have started up the rotary movement which is operated by a battery motor. With the accessory grid you can also roast coffee and pop corn.
Distributed by **S.I.C.C.**

Brogini
italiane
o con questo marchio piume e piumini
rilizzati (come vuole la legge).

D7/325

D7-325

These experts only know what ers tell them, what year, what their and what their divisional managers will let them get away with. If for the last five years they bought 1,000 uprights, and 100 canisters, they will tell you they can sell uprights, but not cans.

These giant retailers have no real conception of quality, only what they can sell. And how do they become "merchants"? They use up all their open-to-buy, and then try to beat their competitors' price. Is this really merchandising? Does it really take a genius to advertise a vac for $88.95, after the store up the street advertises it for $89.95. If they can sell 500 vacs at a 40 percent markup or 700 vacs at a 20 percent markup, which do you think these "number people" will do?

Issue after issue these are the people you turn to for expert advice. Why not ask the people who do the retail selling what the customers ask for? You will have a much truer picture.

BUCK MILLER
Pennsylvania Vacuum Cleaner Dealers Association,
Hershey Vacuum Center,
Hershey, Pa.

AMERICA LOVES PRESTO®
TM

From popped corn to caramel corn in 7 minutes. Presto is first again with this year's most exciting new product for fall and winter selling... Presto® Caramel Corn'r™ popcorn/caramel corn maker. Sure to be a selling sensation. No wonder America loves Presto.

PRESTO®
CARAMEL CORN'R™
popcorn/caramel corn maker

PRESTO®...innovation to make it first—quality that makes it last and last™

©1982 by Nat'l Presto Ind., Inc.

(p. 33 BOTTOM RIGHT CORNER)

Rubbermaid Shows Planters In Jewel Tones

CHICAGO — Rubbermaid Inc. has introduced Gemstone colors of emerald, ruby and sapphire to its line of tapered planters.

The new colors were previewed at the hardware show here and are available immediately.

The Gemstone planters come in 4½-, 6-, 7½- and 8½-inch diameters. They can be ordered in color assorted packs of 12 or single color packs of six.

At the same time, Carlan Inc., a Rubbermaid subsidiary and supplier of Contact brand products, introduced Cushion-All flocked covering.

Cushion-All with an adhesive backing is designed to be applied to the bottoms of lamps, ashtrays, bookends and other products that could scratch fine surfaces.

Available in red, green and black, the covering is offered in bulk rolls 10 yards x 13½-inches. Each color comes in a carton of six rolls.

letters to the editor

Non Giants 'Left Out'

TO THE EDITOR:

Although I have received a lot of useful information from your magazine, you have once again completely left out a large portion of the people in this business, and therefore have printed erroneous information. I refer to your article on floor care in the August 16th issue.

Do you think only the giants sell vacs? Do you think that buyers for one of these giants, who must also spend time on other products, are the most knowledgeable retailers? When was the last time one of these experts sold a vac to a retail customer?

news & views

Cologne Capers

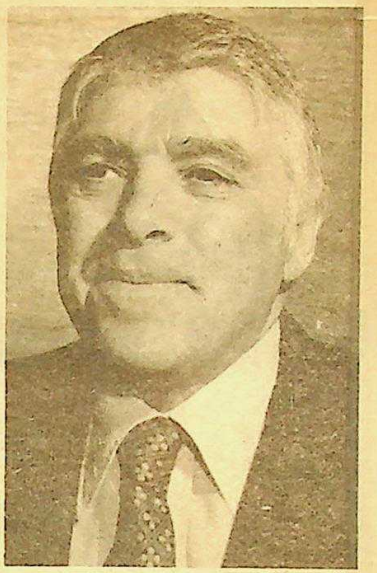
The American Hardware Manufacturers Association will participate at the Cologne Fair for the first time next year. It plans to bring some 30 to 35 member firms to the International Hardware Fair with International Housewares Center, March 9-12. The AHMA representation, coupled with the National Housewares Manufacturers Association's contingent, makes the United States one of the largest and most important delegations from abroad at Cologne, fair officials say.

Heater Hoopla

Markel Nutone Division of Scovill marked production of its four millionth Fan-Glo portable heater this summer with considerable fanfare.

Edward J. Rutkowski and Jack Freidline, Erie County executives representing the mayor of Buffalo, joined the assembly line to help Bob Jacobsen, Markel marketing manager, label the historic unit for the 51-year old manufacturer.

As part of the celebration, Markel has packaged the four millionth Fan-Glo and 500 number heaters in unidentified cartons and shipped them randomly to dealers across the country. The customer who buys the four millionth model and the dealer who sells it will receive trips for two to Hawaii. Customers buying the other 500 specially labeled heaters will receive gifts from Markel.



NHMA vice president JERRY KEARNS

New York Notes

Jerry Kearns, vice president of the National Housewares Manufacturers Association, will detail latest developments in the show timing issue at the Housewares Club of New York's Oct. 16 meeting. Word has it that the Eagle Affiliates executive vice president will have some interesting new information in his update of the subject at the Excelsior Club, Second Ave. and 57th St.

Also on the program will be a slide presentation by Burt Goldstein, buyer for M.L. Lamston New York-based variety chain.

Current Heads AHAM Group

CHICAGO — Robert C. Current, president of Waring Division of Dynamics Corp. of America, has been named chairman of the Portable Appliance executive board of the Assn. of Home Appliance Manufacturers.

He succeeds Harry Hill, vice president and general manager of Proctor-Silex, who served as chairman for three years.

As chairman, Current will be leading all AHAM portable appliance activities. The Board represents 35 portable appliance company members of AHAM in such activities as market data programs, engineering standards, transportation programs and industrial and government rela-

D7/325

OCT., 1981

IT TOOK WEAR-EVER TO BRING THE GREAT TASTE OF MOVIE THEATER POPCORN HOME.

Better Homes & Gardens

OCT, 1981

The Wear-Ever Popcorn Pumper® was the first electric hot air home cornpopper.

It now pops up all brands of popcorn–big, light and delicious without any oil. Yet for butter lovers, there's a big butter cup, too.

For the way you live, the way you eat today, Wear-Ever brings the great taste of movie theater popcorn home.

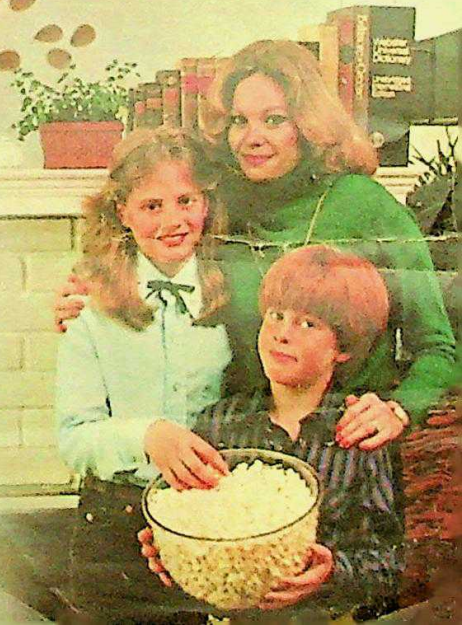
Wear-Ever®

Wear-Ever Aluminum Inc.,
Chillicothe, Ohio 45601.

DuPont SilverStone

Wear-Ever's the way to cook today.

Wear-Ever also makes cookware with DuPont's premium quality surface.



Introducing **Beauflaire™**

With QuietBac™

Dimensional styling.

Supremely comfortable new backing, QuietBac™

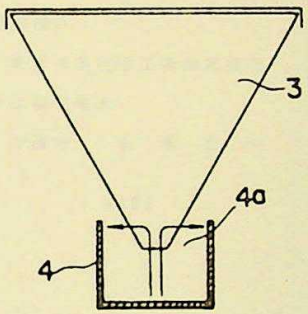
Exclusive JT88® Never-wax wear layer

D 7/325.XR

JAPAN
#56-18220
FEB. 20, 1981

17 M 67

(54) POPCORN MAKER FOR ELECTRONIC RANGE
(11) 56-18220 (A) (43) 20.2.1981 (19) JP
(21) Appl. No. 54-92596 (22) 23.7.1979
(71) TOKYO DENKI KAGAKU KOGYO K.K. (72) TAKESHI ISHINO(2)
(51) Int. Cl³. F24C7/02,A23L1/18



PURPOSE: To make the popcorn efficiently, by providing the bottom end of an open-top conical container with a resonator having a prescribed resonance frequency.

CONSTITUTION: The bottom end of the conical container 3, which has the open-top section and the narrowly closed bottom section, is provided with the resonator 4 having the prescribed resonance frequency. As it is possible, by doing so, to maximize the electric field in the resonator 4 at the time of resonance, it is possible to apply a sufficient electric field to the corn charged in the container 3. And therefore, the corn on the bottom section of the container 3 is concentrically heated and bursted upwards. By the kinetic energy gained at this time the inside of the container 3 is agitated, and unsplitted corn comes to the bottom, and therefore, the popcorn is manufactured efficiently.

10′（例えば第1の共振器10に対して100 MHzの間隔で設ける）を設けることにより，第1の共振器10の共振周波数が外れても，第2の共振器10′が動作することになるので，製造効率の向上を図ることができる。

以上説明したごとく本発明による電子レンジ用ポップコーン製造器においては，共振器の電界が共振時に大となることを利用しポップコーンを製造するごとく構成したので，コーンに対して十分な電界を与えることができ，従って製造効率の高い電子レンジ用ポップコーン製造器を得ることができる。

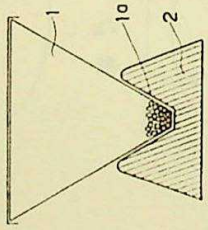
4．図面の簡単な説明

第1図は電子レンジ用ポップコーン製造器の従来例，第2図(a)は本発明によるポップコーン製造器の第1実施例，第2図(b)は第1実施例の空胴共振器における電束の方向を示す図，第3図(a)は本発明によるポップコーン製造器の第2実施例，第3図(b)は第2実施例の空胴共振器における電束の方向を示す図，第4図(a)は本発明によるポップコーン製造器の第3実施例，第4図(b)は第3実施例の同軸線路型共振器における電束の方向を示す図，第5図(a)は本発明によるポップコーン製造器の第4実施例，第5図(b)は第4実施例の誘電体共振器の漏れ電束の方向を示す図，第6図(a)は本発明によるポップコーン製造器の第5実施例，第6図(b)は第5実施例の誘電体共振器の漏れ電束の方向を示す図，第7図(a)は本発明によるポップコーン製造器の第6実施例，第7図(b)は電子レンジのチェンバー内の電磁界分布を示す図，第8図は本発明によるポップコーン製造器の第7実施例である。

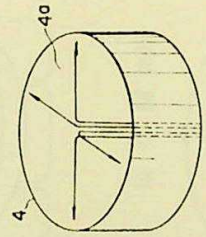
3；容器，　3a；コーン，
4.5；空胴共振器，　6；同軸線路共振器，
7.8；誘電体共振器，　9.9′；コイル，
10.10′；共振器

特許出願人
東京電気化学工業株式会社
特許出願代理人
弁理士　山本恵一

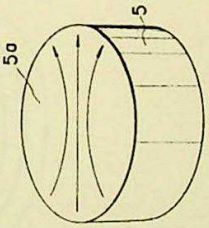
第1図



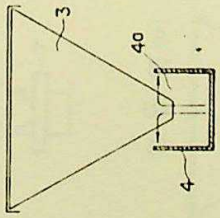
第2図(b)



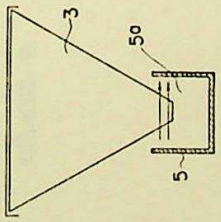
第3図(b)



第2図(a)



第3図(a)



第4図(a)

第4図(b)

第5図(a)

第5図(b)

第6図(a)

第6図(b)

第7図(a)

第7図(b)

第8図

(19) 日本国特許庁 (JP)　　(10) 特許出願公開

(12) 公開特許公報 (A)　　昭56—18220

(51)Int. Cl.³	識別記号	庁内整理番号	(43)公開 昭和56年(1981)2月20日
F 24 C 7/02		6687 3L	
A 23 L 1/18		6712 4B	

発明の数 2
審査請求 有

(全 5 頁)

(54)電子レンジ用ポップコーン製造器

(21)特　願 昭54 92596
(22)出　願 昭54(1979)7月23日
(72)発 明 者 石野健
東京都中央区日本橋一丁目13番1号東京電気化学工業株式会社内
(72)発 明 者 三浦太郎
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(72)発 明 者 橋本康雄
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(71)出 願 人 東京電気化学工業株式会社
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(74)代 理 人 弁理士 山本恵一

明　細　書

1. 発明の名称

電子レンジ用ポップコーン製造器

2. 特許請求の範囲

(1) 上端部が開放され下端部が細い閉じられた形状で任意円錐状の容器と，所定の共振周波数を有し上記容器の下端部に設けられる共振器とからなり，マイクロ波の投射により上記共振器を共振させて得られる強電界を上記容器に収納されたコーンに与え加熱することによってポップコーンを製造することを特徴とする電子レンジ用ポップコーン製造器。

(2) 共振器が空胴共振器であるごとき特許請求の範囲第1項の電子レンジ用ポップコーン製造器。

(3) 共振器が同軸線路型共振器であるごとき特許請求の範囲第1項の電子レンジ用ポップコーン製造器。

(4) 共振器が誘電体共振器であるごとき特許請求の範囲第1項の電子レンジ用ポップコーン製造器。

(5) 上端部が開放され下端部が細い閉じられた任意円錐形状の容器と，該容器の下端部に結合される一端が開いたリング状のワンターンコイルとを有し，該コイルによるインダクタンスと上記容器及び該容器に収納されたコーンにより構成されるキャパシタンスとからなる集中定数型で所定の共振周波数を有する共振器を有し，マイクロ波の投射により上記共振器を共振させて得られる強電界と，上記インダクタンスの鎖交磁束により得られる熱エネルギーとを上記容器に収納されたコーンに与えることによってポップコーンを製造することを特徴とする電子レンジ用ポップコーン製造器。

(6) 夫々異なる共振周波数を有する複数個の共振器が設けられるごとき特許請求の範囲第5項の電子レンジ用ポップコーン製造器。

3. 発明の詳細な説明

本発明は一般にポップコーン製造器に関し，特に電子レンジにおいてポップコーンを製造するのに好適な電子レンジ用ポップコーン製造器に関す

る。

電子レンジはマイクロ波電力を被加熱物である食物に投射し，食物の内部で発生する電力損失により食物を加熱する調理器具で，短時間で加熱することが出来かつ食物を内部から加熱することができるといった特徴を有するので，今日業務用あるいは家庭用として種々の食品の調理に用いられている。

このような電子レンジによる調理対象を更に拡大する付属部品的な器具の一つとして，電子レンジ用のポップコーンを作る器具が従来から知られている。電子レンジを利用するポップコーン製造器としては，従来第1図に示すごときものがある。これは，下端部が閉じられ上端部が開放された任意円錐形状の容器1と該容器1を逆三角形となるごとく支持するプラスチック又はセラミック製のコンセントレータ2とからなり，電子レンジ内においてマイクロ波が投射された場合に，コンセントレータ2の誘電率により容器1のコーン1aの入れられている下端部の電束密度が大となることを

利用し，ポップコーンを製造するごときものである。

しかしながら，この種の従来の製造器においては，コンセントレータのもつ誘電率でコーンに与える電界を強くするだけなので，コーンに対し十分な電界を与えることが必ずしもできず，従って容器に入れられたコーンが弾け終るまで時間が長くなり又は焦げたりあるいは弾けずに残る等の問題があり，製造効率が悪いという欠点を有する。

従って本発明は従来の技術の上記欠点を改善するもので，その目的は製造効率の高い電子レンジ用ポップコーン製造器を提供することにある。この目的を達成するための本発明の基本的な特徴は，コンセントレータの代りに共振器を設け，該共振器を共振させて得られる強電界によりポップコーンを製造するごとき電子レンジ用ポップコーン製造器にある。以下図面により実施例を説明する。

第2図(a)は本発明によるポップコーン製造器の第1実施例，第2図(b)は空胴共振器における電束の方向を示す。図中，3は上端部が開放され下端

部が閉じられた例えば円錐形状の容器，4は一面に開口部$4a$を有する円筒形状の空胴共振器である。容器3と空胴共振器4とは，容器3の下端部が空胴共振器4の開口部$4a$に受容されるごとく構成する。本実施例における空胴共振器4は$TM_{01\frac{1}{2}}$モードで動作するものとし，開口部1近傍において共振時の電界が最大となるごとく構成する。この場合の空胴共振器4内における電束は，第2図(b)に示すごとき方向となる。

本発明によるポップコーン製造器が以上のごとく構成されれば，空胴共振器4内の電界は共振時に最大となるので，容器3内に挿入されたコーンに対して十分な電界を与えることができる。従って，容器3の下端部にあるコーンが集中的に発熱して弾け，この時に得る運動エネルギーでいきおいよく上方に飛び容器3内を攪拌するので弾けていないコーンが下端部に来ることになり，効率よくポップコーンを製造することができる。なお，共振器は電子レンジの周波数で動作するものとする。

第3図(a)は本発明によるポップコーン製造器の第2実施例で，第1実施例と同一の容器3と一面に開口部$5a$を有する円筒形状の空胴共振器5とは，第1実施例と同様に容器3の下端部が共振器5の開口部$5a$に受容されるごとく構成される。本実施例の特徴は空胴共振器5が$TE_{11\frac{1}{2}}$モードで動作するごとく構成される点にあり，共振時においては開口部$5a$の近傍において電界が最大となる。第3図(b)は，この場合の共振器における電束の方向を示す。従って第1実施例と同様，コーンに十分な電界を与えることができる。

第4図(a)は本発明によるポップコーン製造器の第3実施例で，本実施例の特徴は，第1実施例と同一の容器3と一端開放の同軸型共振器6とを用いることにある。両者は第1実施例と同様に容器3の下端部が共振器6の開口部$6a$に受容されるごとく構成する。本実施例における同軸型共振器6は，TEMモードで動作する共振長が$\lambda/4$であるものとする。第4図(b)はこの場合における同軸型共振器6の電束の方向を示す。本実施例では中心

導体が1本増すため損失が増加するが，容器のコーンの電界としては第1及び第2実施例と同様に十分なものを与えることができる。

第5図(a)は本発明によるポップコーン製造器の第4実施例で，本実施例の特徴は，第1実施例と同一の容器3と円形状の誘電体共振器7とを用いることにある。容器3と誘電体共振器7とは，容器3の下端部が共振器7の中央近傍に位置するごとく接続される。共振器7はTM_{110}の共振モードを有するものとし，この場合の漏れ電束の方向は第5図(b)に示すごとくなる。従って共振時には容器3の下端部を多くの漏れ電束が貫ぬくことになるので，容器3に挿入されたコーンには十分な電界が与えられる。

第6図(a)は本発明によるポップコーン製造器の第5実施例で，本実施例の特徴は共振モードが$TE_{11\delta}$である誘電体共振器を用いる点にある。図中，容器3は第1実施例と同一物で，誘電体共振器8は円形状の共振器の中央に空孔$8a$を設けた輪状とし，容器3の下端部が共振器8の空孔$8a$に挿

分布を示すもので，記号(f)は電気力線，(m)は磁束である。

以上のごとく構成されたポップコーン製造器をチェンバーに挿入した場合に，電界の強い場所に配置されれば共振器10は，十分な電界をコーンに与えることになる。一方，磁界の強い場所に配置された場合でも，コイル9がチェンバー内の磁束と鎖交することになるので，コーンを加熱することになる。この場合，与えられる周波数が2.4 GHz程度の高周波であるので，コイルは1回巻で十分に発熱する。

このように本実施例によれば，電界と共に磁界も，ポップコーンの製造に作用することになるので，電子レンジの構造にかかわらず高い製造効率を得ることができる。なお，共振器を構成するインダクタンスとしては前述したコイルに限定されるものでなく，平行線路，トリプレート，マイクロストリップ，スロット及びコプレーナ等の中心導体が地導体に囲まれていないような線路，即ち開放型線路により構成することができる。

入されるごとく構成されている。第6図(b)に示すごとく$TE_{11\delta}$モードでは誘電体中央が強電界となるので，上述のごとく共振器8を輪状とするものである。その結果，空孔$8a$の電束が容器3のコーンを貫めくことになるので，コーンに対し十分な電界を与えることができる。

第7図(a)は本発明によるポップコーン製造器の第6実施例を示すもので，本実施例の特徴は，ワンターンのコイルにより構成されるインダクタンスと容器及びコーンにより構成されるキャパシタンスとで集中定数型の共振器を構成する点にある。図中3は第1実施例と同一の容器で，該容器3の下端部には上述したワンターンコイル9が設けられる。コイル9は一端が開いたリング状で，例えば厚さ2㎜，幅7㎜，直径10㎜程度とする。コイル9の両方のエッジは，コロナの発生を防止するために丸める。なお，共振器10の共振周波数は電子レンジに与えられる周波数に共鳴するものとする。

第7図(b)は電子レンジのチェンバー内の電磁界

なお，本実施例による構成のものと前述した第1図の従来技術によるものとで，35gのコーンを挿入して実験した結果，同一時間に対して，従来技術ではコーンのままの状態のものが30～10個残存したのに対し，本実施例によるものでは残存個数が1～2個であった。

第8図は本発明によるポップコーン製造器の第7実施例を示すもので，第6実施例を更に発展させたものである。その特徴は，所定の周波数間隔をもって共振器を複数個設ける点にある。なお，第7図(a)と同符号のものは同一物を示すものとする。ところで，第6実施例における共振系は，コーン$3a$が弾けていない状態において電子レンジの周波数に共鳴するようになっているので，コーン$3a$が弾けて実効誘電率が低下し共振器10のキャパシタンスが低下すると共振周波数が外れ，コーン$3a$に対するエネルギー供給が低下する。そこで，コーン$3a$が弾けたときに共振するごとく，コイル$9'$によるインダクタンスとコーン$3a$及び容器3によるキャパシタンスとから構成した第2の共振器

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JAPAN
#56-12928

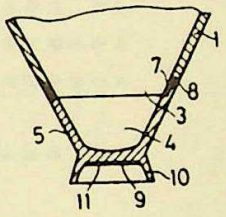
FEB. 7, 1981

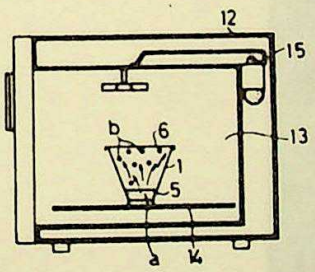
(54) **COOKING CONTAINER FOR USE IN ELECTRONIC OVEN**

(11) **56-12928 (A)** (43) 7.2.1981 (19) JP
(21) Appl. No. 54-88760 (22) 13.7.1979

(71) TOKYO SHIBAURA DENKI K.K. (72) TERUO ISHIKAWA

(51) **Int. Cl³. F24C7/02//A23L1/18**





PURPOSE: To produce popcorn or the like efficiently, by providing a heating unit coated with a high-frequency absorbing material at the bottom of a container with a lid, heating substances to be heated placed in the container effectively.

CONSTITUTION: In producing popcorn, corn beans a··· are placed into container 1 from its upper opening with the cover 6 being removed. After adding a proper amount of edible oil and table salt and covering lid 6, the container 1 is placed on tray 14 in heating chamber 15. Subsequently, when high-frequency output is produced from high-frequency generator 15 after setting of timer, the high-frequency output is absorbed by corn beans a··· and high-frequency absorbing material 11 such as ferrite or tin oxide which is coated over the bottom surface 9 of heating unit 5 in the form of an inverted cone constituting the bottom portion 4 of container 1. After passing of a predetermined time, corn beans a··· are popped upward and formed into popcorn.

らを一体的に結合したものである。第9図は容器本体1の角度θ_1を加熱部5の角度θ_2より小さくし、とうもろこし豆が加熱部5へ集まるようにしたものである。第10図は加熱部5の周囲にこれを囲繞する囲壁21を一体に設け、容器の安定性を図つたものである。第11図は加熱部5の高周波吸収物質11を層14から5㎜以上離間させ、加熱部5の熱が層14に伝導しないようにしたものである。このように構成することによつて層14の劣化、破損を防止することができる。第12図は容器本体1にこれを囲繞する囲壁22を一体に設け、加熱部5へ手指が触れるのを防止したものである。第13図は容器本体1を透明材料、加熱部5を不透明材料として両者の境界を指示目盛23とし、とうもろこし豆a…の投入量を知れるようにしたものである。第14図は容器本体1の外周壁にとうもろこし豆aの投入量を測る指示目盛24を付したものである。なお、第14図において食用油の量を示す指示目盛を追加してもよい。

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第15図は容器本体1の上部外周壁に多数の透孔25…を穿設し、蒸気を外部に逃がすようにしたものである。また、蒸気を逃がす透孔25…は蓋体6に設けてもよい。第16図は側14に支持座10と嵌合する嵌合凹部26を設け、容器の転倒を防止するようにしたものである。

この発明は以上説明したように、容器本体の底部に高周波吸収物質を備えた加熱部を設けたから、容器内に収容された被加熱物を効率よく加熱することができ、特にポップコーンのようにとうもろこし豆をポップさせる調理容器として適するとともに均一に加熱調理することができるという効果がある。

4. 図面の簡単な説明

第1図ないし第3図はこの発明の一実施例を示すもので、第1図は調理容器の斜視図、第2図は同要部の断面図、第3図は使用状態の断面図、第4図ないし第16図はこの発明の他の実施例を示す説明図である。

1…容器本体、4…底部、5…加熱部、6…

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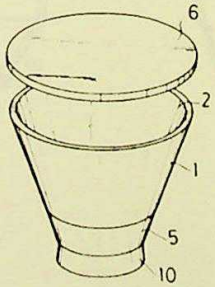
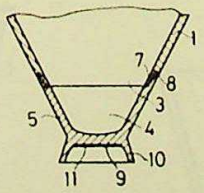
蓋体、11…高周波吸収物質。

出願人代理人　弁理士　高　江　武　彦

第1図



第2図



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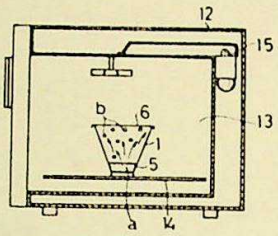
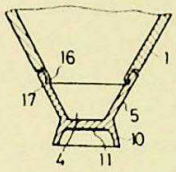
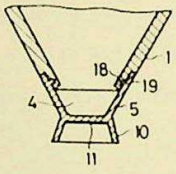
第3図



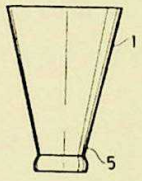
第4図



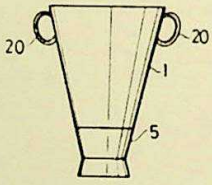
第5図



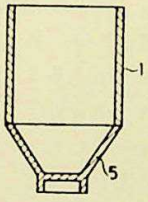
第6図



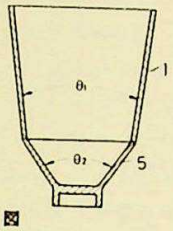
第7図



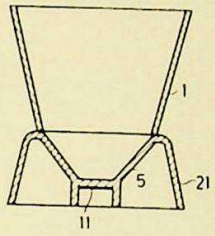
第8図



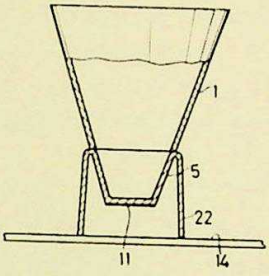
第9図



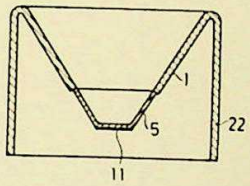
第10図



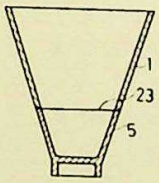
第11図



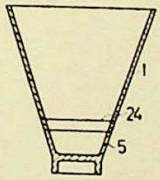
第12図



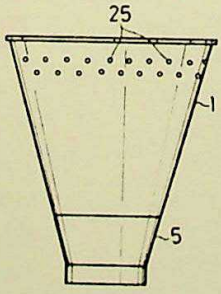
第13図



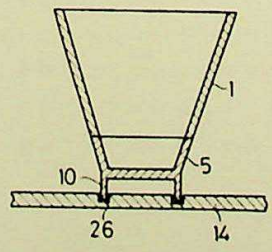
第14図



第15図



第16図



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(12) 公開特許公報 (A)　　昭56—12928

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F 24 C 7/02		6687 3L	
A 23 L 1/18		6712 4B	

発明の数　1
審査請求　有

(全 4 頁)

(54) 電子レンジ用調理容器

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(21) 特願　昭54—88760
(22) 出願　昭54(1979)7月13日

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明　細　書

1. 発明の名称

電子レンジ用調理容器

2. 特許請求の範囲

(1) 高周波加熱室内に収納して内部に収容された被加熱物を高周波によつて加熱する調理容器において、蓋体を有する容器本体の底部に高周波吸収物質を備えた加熱部を設けたことを特徴とする電子レンジ用調理容器。

(2) 容器本体と加熱部とを一体に形成したことを特徴とする特許請求の範囲第1項記載の電子レンジ用調理容器。

(3) 容器本体と加熱部とを別体とし、これら両者をねじ込み結合したことを特徴とする特許請求の範囲第1項記載の電子レンジ用調理容器。

(4) 容器本体と加熱部とを別体とし、これら両者を係合凸部と係合凹部とによつて結合したことを特徴とする特許請求の範囲第1項記載の電子レンジ用調理容器。

(5) 容器本体に把手を設けたことを特徴とする特許請求の範囲第1項、第2項、第3項または第4項記載の電子レンジ用調理容器。

(6) 容器本体を透明材料で形成したことを特徴とする特許請求の範囲第1項、第2項、第3項、第4項または第5項記載の電子レンジ用調理容器。

(7) 加熱部を逆円すい状に形成したことを特徴とする特許請求の範囲第1項、第2項、第3項、第4項、第5項または第6項記載の電子レンジ用調理容器。

(8) 容器本体の外周面に被加熱部の量を測る指示目盛を設けたことを特徴とする特許請求の範囲第1項、第2項、第3項、第4項、第5項、第6項または第7項記載の電子レンジ用調理容器。

3. 発明の詳細な説明

この発明は電子レンジによつてたとえばポップコーンを調理する場合に用いる電子レンジ用調理容器に関する。

電子レンジの普及に伴つて、高周波加熱により各種食品を調理する調理容器が知られている。ところが、ポップコーンを製造する専用の調理容器は現在知られていない。このポップコーンを製造する場合には、とうもろこし豆を容器に収容し、所定時間高周波加熱することにより、とうもろこし豆をポップさせるが、このとき容器から飛び出し、高周波加熱室内に飛散するとともに加熱に伴つてとうもろこし豆が容器内で移動し、加熱むらが生じる。したがつて、所定時間加熱してもポップしていないとうもろこし豆が残り、これとポップさせるために加熱時間を延長すると既にポップしているものが焦げたり、燃えるという不都合がある。

この発明は上記のような事情に着目してなされたもので、その目的とするところは、加熱調理中に容器から飛散することはなく、しかも均一に加熱することができ、特にポップコーンの製造に適する電子レンジ用調理容器を提供しようとするものである。

以下、この発明を図面に示す一実施例にもとずいて説明する。第1図ないし第3図中1は逆円すい状をなし、上下に開口部2，3を有する容器本体で、この下部の開口部3には容器本体1の底部4を形成する逆円すい状の加熱部5が後述する手段によつて一体的に結合されている。そして、上記容器本体1の上部の開口部2には蓋体6が着脱可能に設けられている。また、上記容器本体1は透明な耐熱性ガラスあるいは透明な耐熱性プラスチック材料によつて成形され、その開口部3の外周縁にはおねじ7が刻設されている。また、上記加熱部5は耐熱性材料たとえばセラミックなどによつて形成され、その底部4の開口縁には上記おねじ7と螺合するめねじ8が刻設されている。さらに、この加熱部5の下部には下面9を囲繞する突堤からなる支持座10が一体に設けられ、上記下面9にはフェライトまたは酸化錫皮膜などの高周波吸収物質11が塗着されている。

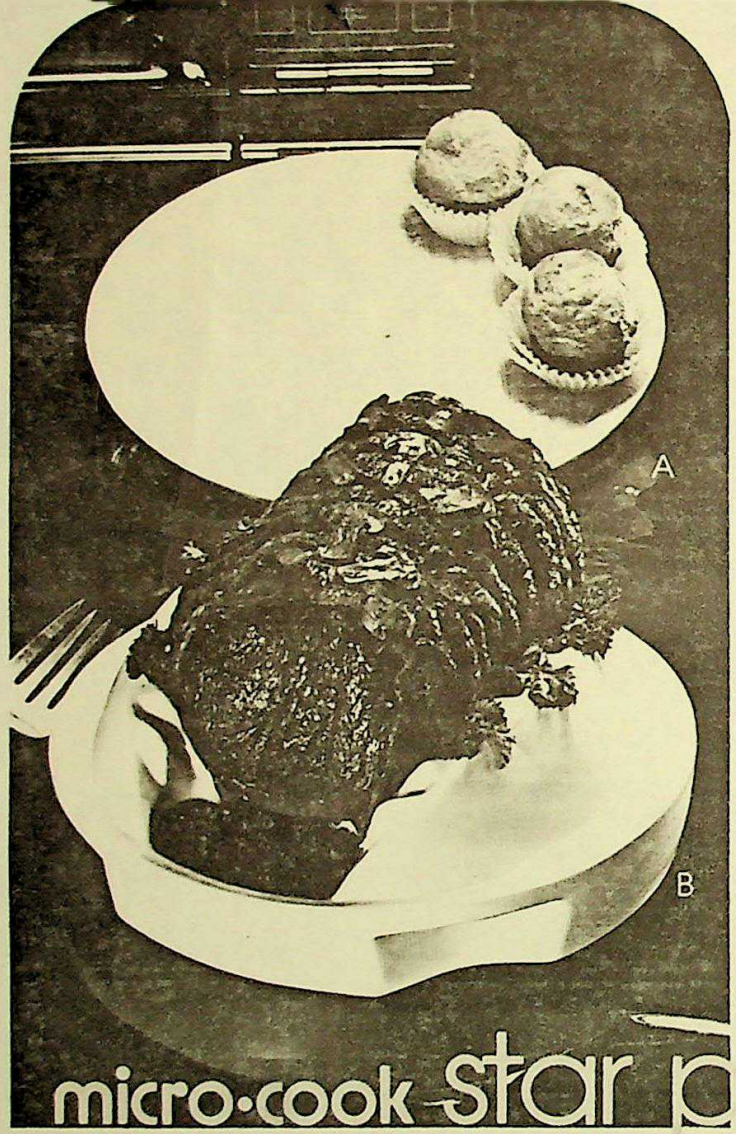
つぎに、上述のように構成された調理容器を

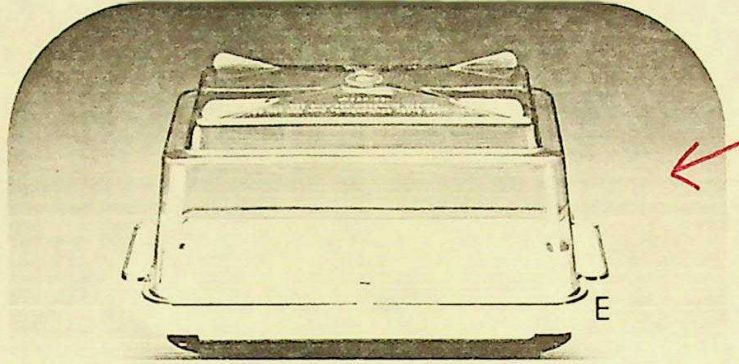
用いてポップコーンを製造する方法について説明する。まず、蓋体6を外して開口部2からとうもろこし豆a…を投入するとともに食用油、食塩等を適宜加えると、上記とうもろこし豆a…は加熱部5の底部4に集まる。つぎに、開口部2に蓋体6を嵌合させ、調理容器を第3図で示すように電子レンジ12の高周波加熱室15内の棚14上に載置する。この状態で、電子レンジ13のタイマをセットし、高周波発生器16から高周波を発生すると、高周波は加熱部5の高周波吸収物質11およびとうもろこし豆a…に吸収される。したがつて、所定時間（3～5分）経過すると、とうもろこし豆a…は加熱されてポップして膨らみ、飛び上がり、上層のポップされていないとうもろこし豆a…は傾斜している内周面に沿つて徐々に底部4方向へ落ち込み、同様に次々ポップされる。そして、最終的に容器本体1内は製造されたポップコーンb…で満杯となり、調理が完了する。この場合、容器本体1は透明であるため、ポップ状態

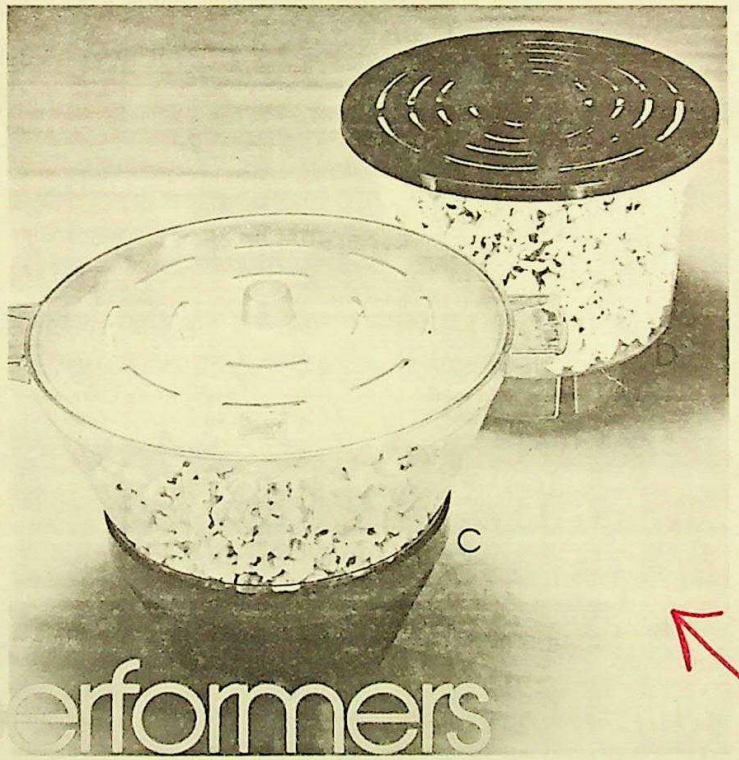
を外部から確認することができる。

なお、この発明の調理容器は上記実施例に限定されるものではなく、つぎのように構成してもよい。すなわち、第4図は容器本体1に係合凸部16、加熱部5に係合凹部17を設け、これら係合凸部16と係合凹部17とを圧入して結合したものである。第5図は容器本体1に係合凹部18、加熱部5に係合凸部19を設け、同様に圧入して結合したものである。第6図は容器本体1と加熱部5とを耐熱性の結晶化透明ガラスによつて一体成形したものである。第7図は容器本体1の外側壁に一対の把手20，20を設け、容器本体1が加熱されても高周波加熱室13から容易に取り出すことができるようにしたものである。なお、この場合、把手20，20に高周波の吸収の少ない材料たとえばポリプロピレン、ポリエチレン、テフロン、シリコン、ポリスルフォンおよびこれらの組合せであつてもよい。第8図は容器本体1を円筒状に形成し、加熱部5を逆円すい状に形成して、これ

D7/325
THE MICRO. COOK CATALOG
1980 CAT.
Rec'd. JULY, 1981
p. 2







micro·cook star performers

for mealtime, snacktime, partytime

CLAY WARE CUISIN

The recipes below are specially developed serving in clay ware. When using clay war following method of preparation is suggest of cooker in water for 10-15 min. Drain wate cooker and set in oven. If additional color with Kitchen Bouquet™, Worchestershire food at temperature, and time shown in re

FILLET OF SOLE ALMO

½ c. silvered almonds
½ c. butter, margarine
1½ lbs. fresh or frozen fillet of sole
½ tsp. sal
⅛ tsp. pe
1 tsp. chc
1 tbs. lem

Place almonds, butter in 8-in. sq. baking di on High for 5 min. or till almonds gold almonds with slotted spoon, set aside. cooker with butter coating both sides of fi pepper, parsley, lemon juice. Cook co Sprinkle with almonds. Cook uncovered f fish flakes when tested with fork. Garnish parsley.

CORNISH GAME HENS

2 Cornish Game Hens

Wash hens, pat dry; season insides with butter, salt, pepper. Brush with melted butter mixed with 1 tsp. Kitchen Bouquet™. Cover leg ends, wings with inch of foil for first half of cooking period. Place hens in cookers, bake for 8 min. on High power, breast side down. Remove from oven, brush again with butter mixture, turn, bake for 12 more min. on High. Remove foil. Serve on bed of wild rice; garnish with parsley. let birds stand 6 min. covered. (If stuffing desired, cook wild rice for 15 minutes on High with cover Stuff birds at mid-point (after 8 min.).

Recipes shown, developed, tested for microwave ovens.

A. BAKE-'N-SERVE PLATTER...

the hot plate you don't plug in! Micro-cooks food in your oven AND keeps it hot at your table. Specially treated ceramic retains heat for up to 45 minutes. Ends those "reheating runs" back and forth to the kitchen. Great for rolls, bread, muffins. Keeps hors d'euvres, pizza warm and ready on party buffet. Use it to reheat meat left-overs — juices collect in tiny "wells" on bottom. 2½" diameter.

20-13004 * $17.95 each

B. ALL-PURPOSE MEAT RACK...

lets you defrost, cook, slice and serve meaty main courses using one convenient dish. 11-inch ceramic rack holds beef and pork roasts, hams and turkeys at just the right cooking angle. Unique ceramic "ribs" elevate food so juices drain into basin below, ready to collect for easy basting and gravy making. Thermally-designed base keeps meats warmer longer at your table.

20-16003 * $19.95 each

C. FAMILY POPPER...

The perfect size for family get togethers—TV time, party time, anytime. Makes 3 quarts of warm crunchy popcorn—with or without oil—as fast as you can say, "and now time for a commercial."
In comparing poppers, we feel this is the finest unit available for making popcorn in your microwave oven.
The see-through cone-shaped dish with handles and cover, makes an attractive serving bowl, too.

10-08002 $14.95 each

* D. DRY POPPER...

just the thing for cholesteral conscious snackers. Pops 3 quarts of corn in minutes without butter or oil.

10-10001 $9.95 each

* E. DELUXE POPPER...

a versatile 4-piece set that does more than pop corn. Use it to *roast* meats; *simmer* stews, sauces; *heat* rolls, frozen entrees; *cook* casseroles, vegetables. Set includes roasting rack, roasting dish and cover/simmer pot.

10-03005 $42.95 each

BOTTOM LEFT OF P. 2

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MARCH, 1980
BETTER HOMES & GARDENS

P. 166

Better Homes & Gardens

continued

Cooking for small families

INDIVIDUAL SEAFOOD STRATAS

Next time, try frozen broccoli spears in place of the asparagus—

- 9 frozen asparagus spears
- 3 slices French bread, cut ½ inch thick *or* 1½ cups plain croutons
- 1 7¾-ounce can salmon, drained, bones removed, and broken into chunks
- ½ cup shredded Swiss *or* brick cheese (2 ounces)

• • •

- 1 7¾-ounce can semi-condensed cream of mushroom soup
- 3 eggs
- ¼ cup milk
- 1 teaspoon Worcestershire sauce
- ⅛ teaspoon dried tarragon, crushed
- Snipped chives

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Season
Blend

To s
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Makes

March, 1980
page 166

Bet our popper can beat their popper.

Only the Presto® popper lets you pop non-stop, as much or as little as you want. Pour in more popcorn even while popping. No waiting or measuring.

Hot air, not hot oil, explodes kernels into plump, crisp puffs of corn. No extra calories.

Popping chamber and chute remove and wipe clean easily.

Only the Presto® popper butters automatically if you wish, with the exclusive ButterWell™ melter.

Great Presto styling. The look and performance of a well engineered appliance—not a toy.

Hot air corn popping is a great idea—but make sure you get the best hot air popper. Presto® PopCornNow™ continuous corn popper. Worth shopping for... even worth waiting for. It has the features the others would have—if they'd thought of them.

PRESTO®

...innovation to make it first—quality that makes it last and last™

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uide to asic esives

something you value, With these basic ad- and, you'll be ready to bout anything from a randmother's favorite

(polyvinyl acetate) is a ndby that comes in a bottle. You'll find dif- f white glue specifically cts, woodworking, and nding jobs. All of these de from basically the out vary in viscosity and th. White glue becomes hen dry, does not stain, about six hours; curing akes the bond to reach takes 24 hours. White old up under continual ftens when exposed to

esive works on almost extremely strong, com- roof, heat tolerant, and ng dissimilar materials neven surfaces. Epoxy parts—a resin and a ch must be mixed to- al proportions for the ess to occur. Don't let are you away; it's hard u follow directions care- mponents are available liquid (in tubes) or solid e liquid is squeezed out on a piece of scrap ma- xed with an ice cream like; the solid form is her until well blended. of epoxy is excellent for u can even repair leak- it. Setting and curing y (some types are almost instant" glue) so check d be sure to wait the time before using the

(cyanoacrylate) makes pair jobs a snap. The so- glue bonds on contact, er resistant, and very you may not want to sus-

FEB. 1980 Better Homes & Gardens

Bet our popper can beat their popper.

FEB, 1980

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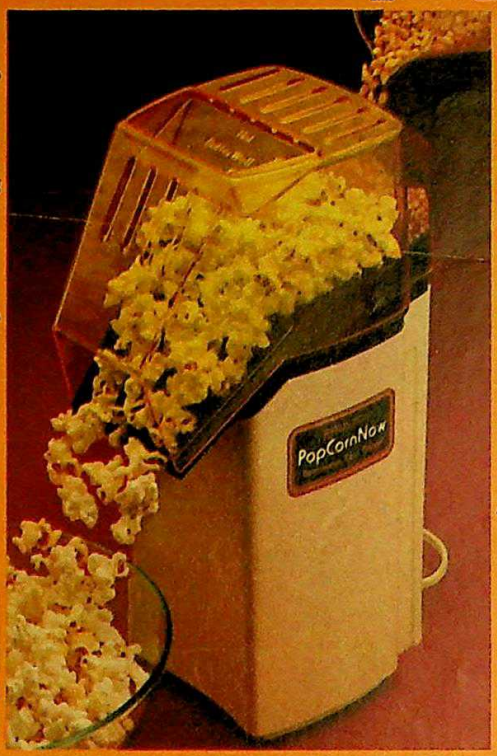

Only the Presto® popper butters automatically if you wish, with the exclusive ButterWell™ melter.

P. 83

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pend steel I-beams from your ceiling with a single drop of glue (which supposedly can be done), you will discover many practical uses for this type of adhesive. Instant glue does have some drawbacks (nothing is perfect). It cannot be used on porous materials, and the surfaces to be bonded must fit together exactly. This kind of glue comes in very small packages; you only need a drop or two. And be very careful not to get any on your fingers; they could be stuck together for a long, long time.

- *Silicone sealant* is both a sealant and an adhesive. You can use the sealant right out of the tube or cartridge to repair broken tiles, glass, wood, or ceramics. You can also use it to waterproof and strengthen material, apply fabric patches, or caulk around bathtubs, windows, and sinks. Silicone sealant fills gaps readily, sets in about one hour, and is waterproof. Curing time is around 24 hours. Match the color of the sealant to whatever you're mending or caulking; it comes in clear, white, black, or silver.

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Unexpecte taste

5 MG TAR

5 mg. "tar", 0.4 mg. nicotine av. per cigarette, FTC Report May 1978.

Warning: The Surgeon General Has
That Cigarette Smoking Is Dangerous to

HFD — Retailing Home Furnishing

D7/325

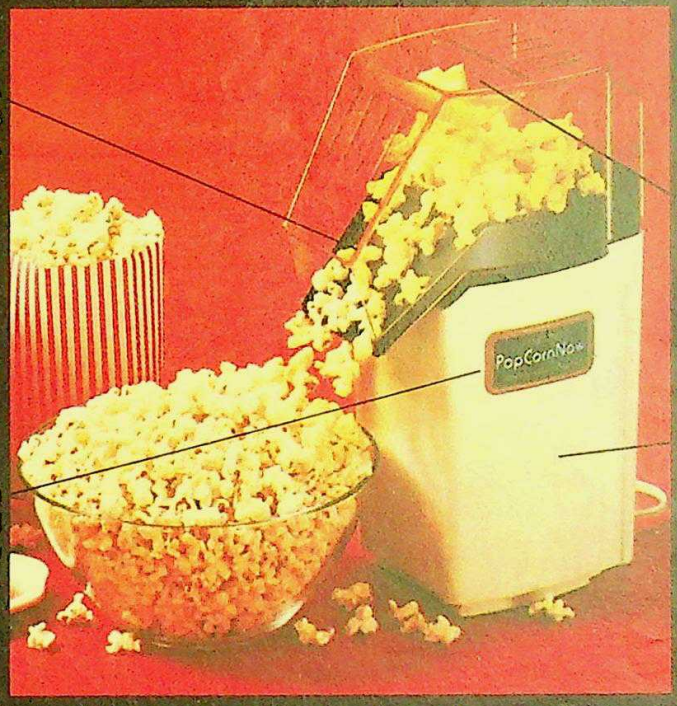
P. 4
SEC. III

MAR. 12, 1979

businessmen honor contract
but still some do not.
UNDERSTANDIN
Chinese pricing policies is als

Buyer beware: There's a lot of hot air in today's popper promises. Presto® PopCornNow™ continuous corn popper means business.

Pops without stopping. As much or as little as you want, continuously.



Self-buttering as it pops. Only two parts to wash.

Handsome Presto styling. The look consumers buy on sight.

Powerful promotion from Presto. National TV to make Presto first choice.

Your customers have been sold on Presto® PopCornNow™ continuous corn popper. Feature for feature it has the appeal that can make it number one in buyer preference. Presto will back this winner with powerful national television for even greater sales. Presto® PopCornNow™ continuous popper—your basic SKU, because when you stock Presto you stock the leader.

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Tea and Empathy — and Fierce C

"The necktie won't become popular because it is too uncomfortable." Huang Ts'i-...

Cont'd From Page 2

Chinese, you have to drink
little tea. Getting to know on
another is very important."

Reynolds also advised firm
to bring copies of their annua
reports and financia
statements. As Huang put it

and higher inflation rates. We have to find other ways that are both more efficient and more equitable."

The Conyers bill, accordingly, would trim the standard workweek from 40 to 35 hours in stages over a four-year period. The premium rate for overtime worked in excess of the standard would be advanced from time-and-a-half to double-time pay, a long-time objective of organized labor but one which Congress has declined to consider because of inflationary implications.

The overtime penalty pay proviso is considered fundamental to any spread-the-work strategy. As many as 20 million workers are believed employed for more than 40 hours a week. Many count on the overtime to buoy up their take-home pay and buying power. But critics insist this is done at the expense of disadvantaged workers (youth, minorities, women) and others seeking to enter the labor market.

CONYERS ARGUES THAT 13.6 million production workers today are producing several hundred per cent more than about the same number produced back in 1955. Yet, it is added, these productivity gains have not been accompanied by commensurate gains in production-related employment.

Conyers concedes there is no single, all-embracing solution to cyclical and structural unemployment. But he looks on the pending shorter week legislation as one good prospect of checking unemployment without sacrificing productivity and one way to carry

implement its payment plan for creditors.

Bankruptcy lawyers, however, see a basic

handled largely on negotiated basis, with t landlord applying whatev pressure he could — threats

D7/325

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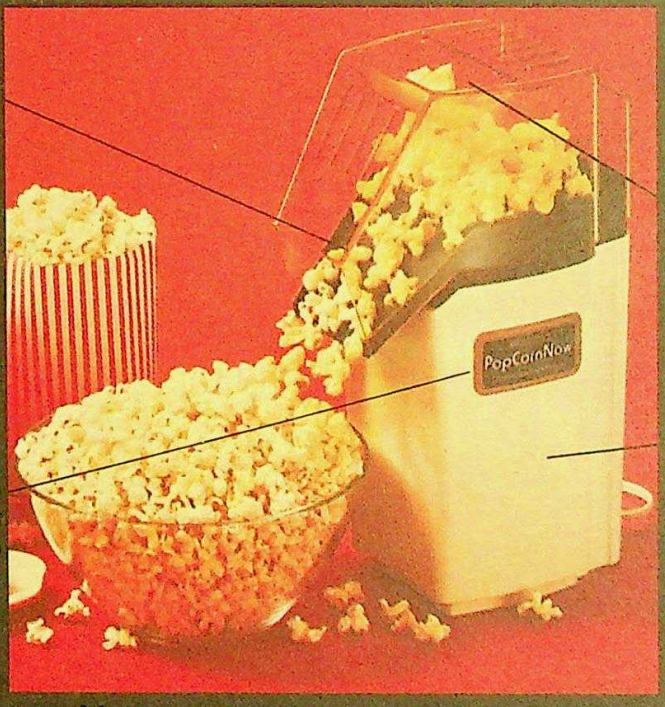

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DU PONT
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SilverStone
PREMIUM
NON-STICK SURFACE

RETAILING HOME FURNISHINGS

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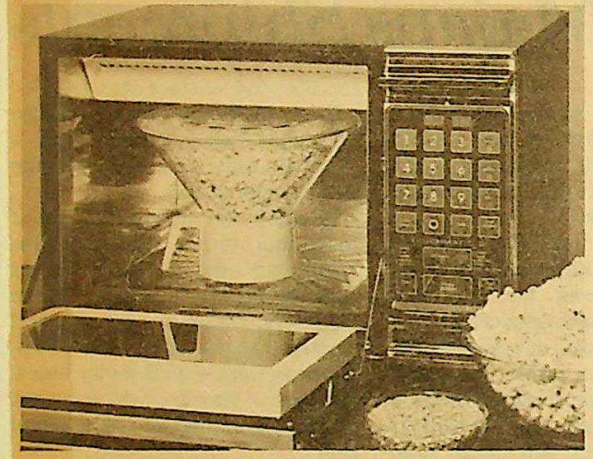
news & views



AMANA'S microwave corn popper

Amana's A'Poppin'

Amana, the Iowa-based microwave oven producer, is giving the corn popper market an added dimension with a new unit for use with its microwave ovens.

The 3-quart popper uses a heat-resistant plastic concentrator base which focuses microwave energy at a specific point to create the heat and pop the corn in 3½ minutes without oils or shortening.

While the design is now used specifically for the corn popper, Amana officials say it could have other cooking applications. Retail price for the popper unit, which will be promoted for Mother's Day, has not been set.

Club Activities

The Housewares Club of Chicago has set May 11 for a "Night at the Races," where members will enjoy dinner and racing from the enclosed clubhouse at the Maywood Park, Ill., race track. Golfing days have been scheduled for June 8 and Sept. 14, both at St. Andrews Golf and Country Club, West Chicago.

Nominations for president, first vice-president, second vice-president, secretary and treasurer as well as five directors will be made at the New Jersey Housewares Club's May 2 at Kingston Restaurant, Union. Election of officers will be held at the group's June 1 golf outing at Cedar Hill Country Club, Livingston.

The Housewares Club of New England's annual outing is set for Cape Cod June 12.

The day-long outpng will feature golf, tennis, swimming and deep-sea fishing at the Seabury Country Club, Mashpee, Mass., topped with dinner that evening. Tickets for the event are $15 a person. Bus transportation to the Cape from Boston will be available.

Happy Birthday, Mickey

Eagle Affiliates, Brooklyn housewares producer, is helping celebrate Mickey Mouse's 50th birthday this year.

It is offering a new floor display featuring its newest item, Mickey's Mug Bowl, which sports designs of Walt Disney's famous mouse and many of his friends. The display holds 48 pieces prepriced at 98 cents each.

executive changes

Continued From Page 30

Ubertino at Pamida

CHICAGO — Ken Ubertino, Ace Hardware's housewares merchandise manager, is moving to Omaha shortly to become merchandise vice president for Pamida Inc.

Pamida runs some 200 Gibson Discount Stores in the Midwest. No replacement has been named at Ace.

Nicholson to Head Equity Regional Sales

PROVIDENCE, R.I. — Gene Nicholson has been named to the new post of regional sales manager for Equity Americana Inc., here.

Formerly sales manager of Slaymaker Lock Co., Nicholson in his new post will have headquarters in Chicago and be responsible for sales of the firm's clock line in all the Midwestern states, and Texas.

Zick Has New Duties at Leigh

COOPERVILLE, Mich. — Larry G. Zick has been named marketing and sales manager, lawn and garden/housewares, for Leigh Products Inc.'s Universal-Gerwin division.

He will be responsible for the firm's line of Bromwell housewares and the Universal line of lawn and garden sprayers. He was sales manager for Universal sprayers.

APRIL 24, 1978 SEC. 1 HFD P.43

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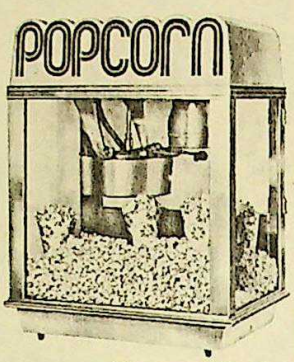
GIFTS & DECORATIVE ACCESSORIES
MARCH, 1978 P. 121

Pinto Pop $439.00



Whiz Bang $635.00

Gay 90's Wagon $1,395.00

Popcorn

for promotion and profit

Inside or outside your store, popcorn creates excitement and a friendly atmosphere. Sell it (at 75% profit) or give it away, a quart only costs 5¢ . . . popcorn's a proven traffic builder/profitmaker.

Gold Medal, the nation's leading manufacturer of snack food equipment offers you safe, dependable, easy-to-use popcorn machines plus ingredients, training and merchandising aids. All machines are underwriters approved!

Write today for more information. Catalog/Dealer inquires welcomed.

GOLD MEDAL PRODUCTS CO.
1899A Freeman Ave., Cincinnati, OH • 513/381-1313

Antiquely Speaking

We have many new things to show you.

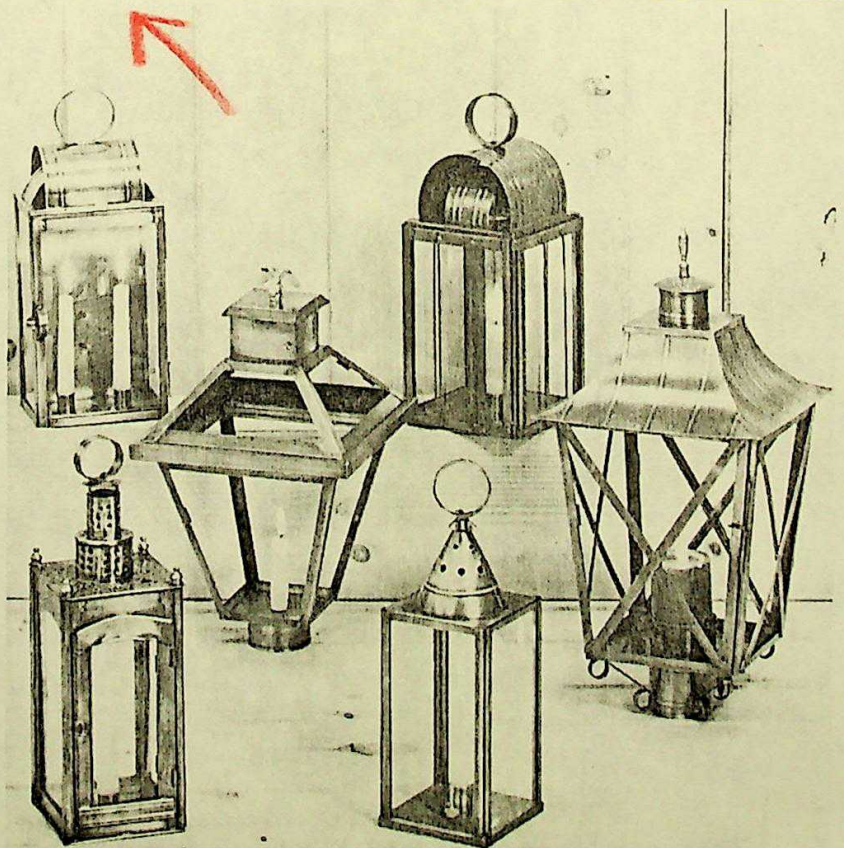
ANTIQUITY HANDCRAFTED ARTIFACTS, hand makers of metal creations, which are authentic reproductions of Colonial pieces — and a charming selection of wood pieces made from barns 80 to 100 years old, now colorfully decorated, will be shown at

Columbus Gift Show
Room 410 — Tri-State Gift Show
Gift Mart

Boston Gift Show
Room 320 — The Center
Bedfrod, Mass.

Send for Catalog

Antiquity Handcrafted Artifacts, Inc.,
18th Century Artifacts,
225 North Barron Street,
[illegible] 532[illegible]



LIFT BACK TO VIEW GENTLY
P.31 BACK

D7/325,

JAN 16, 1978
P. 23

Introducing the new Wear-Ever

Popcorn Pumper™

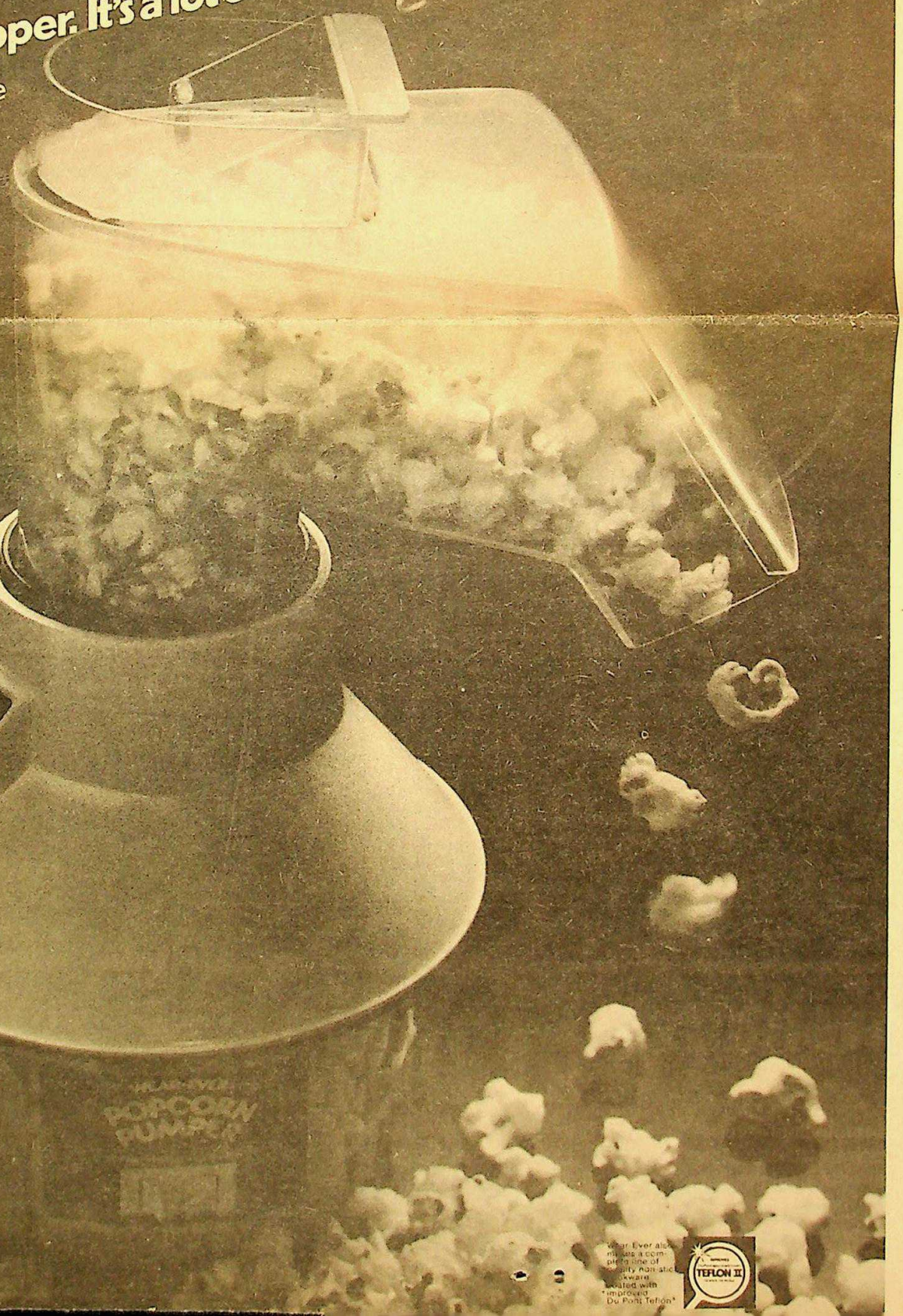
Wear-Ever Aluminum Inc., Chillicothe, Ohio 45601

Electric hot air cornpopper. It's a lot of hot air, not hot oil.

Leave it to Wear-Ever to introduce not just another hot oil cornpopper, but a different way to pop corn!

The new Wear-Ever Popcorn Pumper uses a jet of hot air to explode corn kernels into big, light, delicious-tasting popcorn with no messy clean-up. It's fast, too. Only five minutes to complete the first cycle. And then it pops corn continuously. For butter lovers—there's even a built-in butter melter.

Come taste success. See the new Wear-Ever Popcorn Pumper in action at the new Wear-Ever Booth 4125-30. Then, make sure you order enough. Because we're giving Popcorn Pumper constant television, print and radio support throughout the year. And, we've got demo films, hand-out pieces, newspaper repros, everything you need to make Popcorn Pumper your big sales development, too. TM: Trademark of Wear-Ever Aluminum, Inc.



Come Taste Success
Wear-Ever '78
Booth 4125-30

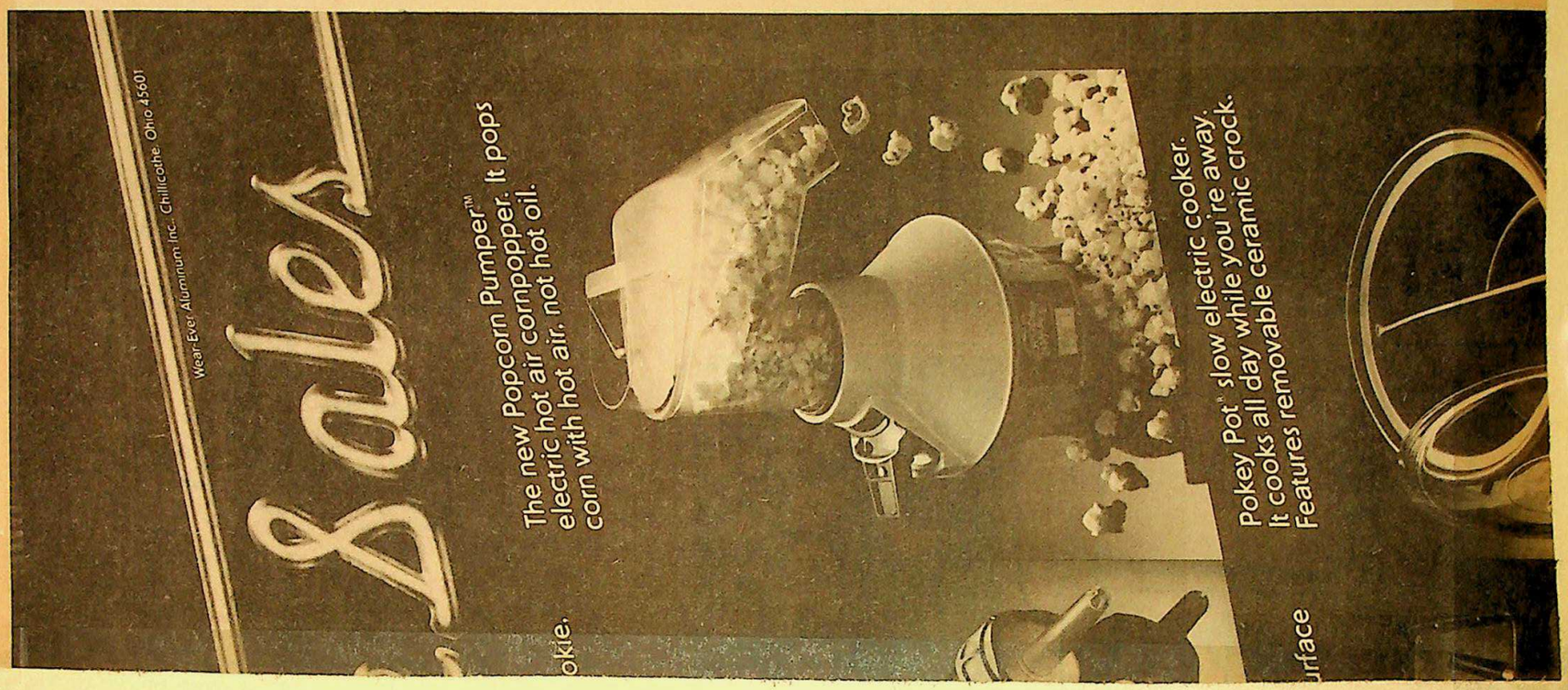
Wear-Ever also makes a complete line of quality non-stick cookware coated with improved Du Pont Teflon*

TEFLON II

D 7-325
P. 23

P 31 (UNDER FLAP)

P.31


Sales
Wear-Ever Aluminum Inc. Chillicothe, Ohio 45601
The new Popcorn Pumper™. It pops electric hot air cornpopper. It pops corn with hot air, not hot oil.
okie.
Pokey Pot™ slow electric cooker. It cooks all day while you're away. Features removable ceramic crock.
urface

Our new Colormat line consists of remarkably fine color lithography of the most popular children's cartoon characters.

Plus remarkably fine color lithography of exclusive decorator and seasonal designs.

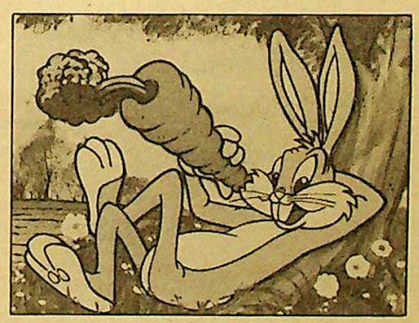
foam rubber backing for maximum comfort.

The Colormats all star lineup includes Yogi Bear, Scoobey-Do, The Flintstones, Raggedy Ann and Andy, Bugs Bunny and many more.

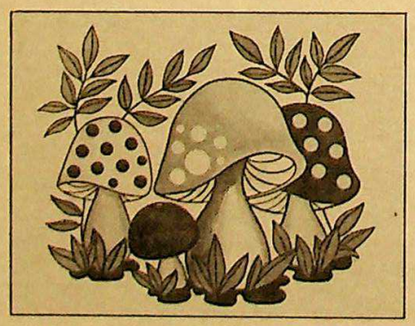
You really have to see Colormats to believe them. So we'll see you at the Housewares Show.

Yogi Bear and his pal Boo Boo are tops with both children and grownups.

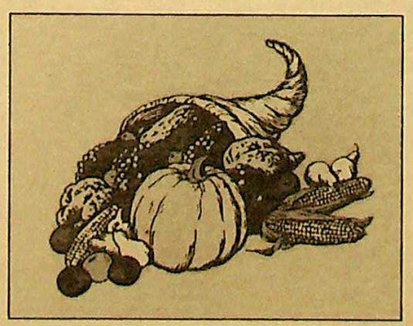
Raggedy Ann and Andy are 50 years old, but their popularity never wanes.



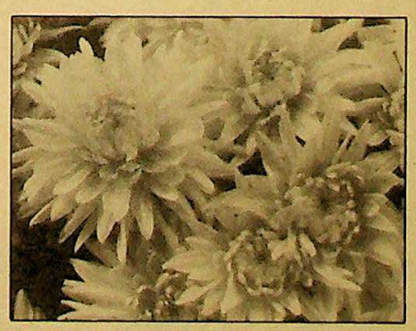
Bugs Bunny is one of the most popular cartoon characters ever—and he's still going strong.



Mushrooms have been fantastic sellers on scores of housewares items—and should be on Colormats too.



Cornucopia design is one of the Colormats created especially for kitchen use.



Floral mat is ideal for just about any room in any home.

See colormats™ at the vanguard Exhibit Booths L-622 & L-624

GAILSTYN (New York): "Tea for Two" kettle holds 1 qt., and is made of porcelain with enamel coating and teak wood accents. Available in yellow, cinnamon, white and chocolate brown with a suggested retail price of $13.50. Also new is the "Tropex" tea pot which holds 3 qts. Made of porcelain enamel on steel, the kettle's suggested retail price is $21.

D.7/325

"Here's Sunbeam's great, old-fashioned popcorn popper!

BETTER HOMES & GARDENS
P.63 JUNE, 1977

stays here in the den."

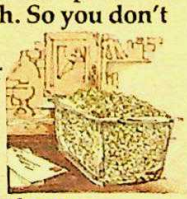
BETTER HOMES & GARDENS JUNE, 1977
p. 63

Butters four quarts of popcorn as it's popping.

I've never seen anything like the Great American Popcorn Machine Corn Popper. It's a miniature version of a turn-of-the-century popcorn wagon. With spoked wheels and lots of fancy gilt trim. And best of all, it turns out all that hot, buttered popcorn a lot faster and easier than in my grandma's day.

If your family's anything like mine, your Great American Popcorn Machine Corn Popper will sure be busy. It looks so super, ours stays out right on the shelf in the family room, ready for fun. This popcorn maker's so nice to use—and so much fun besides.

Even butters the popcorn for you, while it's popping. And the cover flips over to become a serving dish. So you don't get stuck with an extra bowl to wash. Nice! For old-fashioned enjoyment, you can't beat The Great American Popcorn Machine Corn Popper from Sunbeam.



Sunbeam

I really love their quality
Shirley Jones

Sunbeam Appliance Company, a division of Sunbeam Corporation ® Sunbeam TM The Great American Popcorn Machine © Sunbeam Corporation, 1977

THESE PEOPLE KNOW FOOD

Fresh Fruit Vegetable Id from Expert on the Farm

By Sally P. Torpey

"My father started retailing vegetables the curb, with just a couple of sawhorses a turned boxes with produce on top," says G mann, pointing to one edge of the triangular

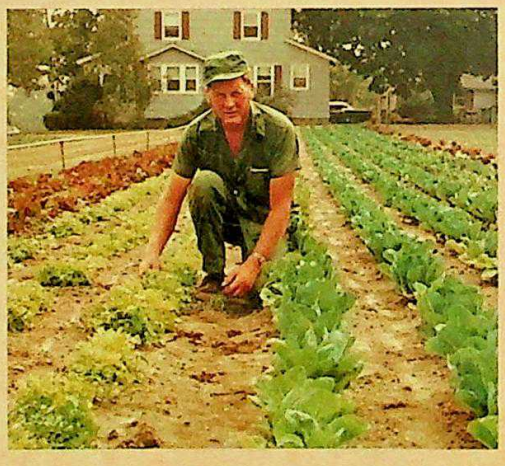
Grossmann's Farm has changed a bit sinc the produce is sold from a large open build old family farmhouse that still stands on the And the size of the business has grown alo Grossmann family tree.

George, with help from his son and son-in-law, runs the Long Island farm. His sister, Barbara, operates a cut-flower business from one room of the warehouse-like building, and in another room Aunt Anna teaches a cooking class for customers interested in new ways to use the fresh fruits and vegetables they buy. During the selling season, April through November, the wives and children help, too.

"After Thanksgiving, we get a rest from the customers and they get a rest from us," George jokes. "In the winter months, we work inside the greenhouses, in 80-degree temperatures, dressed like this," indicating his cotton short-sleeved shirt. "We have to start the seedlings for the next spring."

With so much produce available in supermarkets, why do pe out of their way to buy ve fruits at Grossmann's Far answer makes sense in formulated foods and p "When people stop here, out and see the produce gr fields, they can see it b and they can buy it on the that's fresh!

PRODUCE POINTERS



"The upswing in home gardening has helped business," George claims, "because it's increased interest in good, fresh produce."

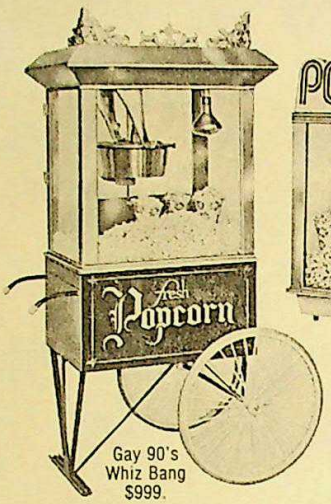
And freshness, he points out, is crucial with produce. "Corn should be eaten the same day it's picked. Always buy corn that's still in the husk, and look for husks that are a rich green color. Peel back the husk on an ear. The silks should have some life to them—not be dry. The corn kernels should be small. Pop a few kernels with your thumbnail; the milk should spurt out.

"A young cabbagehead should be harc the more matur whiter the insi less tender the head should be soft. If it's soft ture and will and deteriorat side leaves ar wrapper leaves purpose is to head. They're should be disc

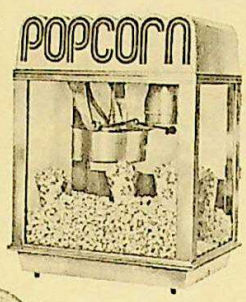
"Melons sho —if they're soft they're over the a melon's picke should pull out the end opposi with your thum

D7/325

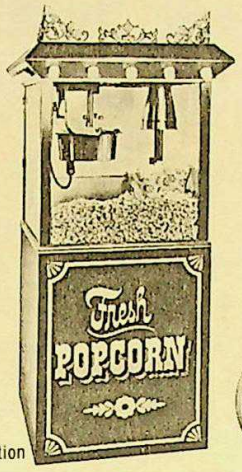
The Proper Poppers



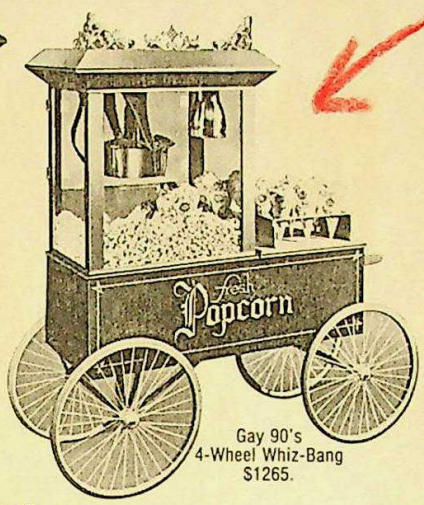
Gay 90's
Whiz Bang
$999.



Counter Models
$395. to $1295.



Antique Citation
$1479.

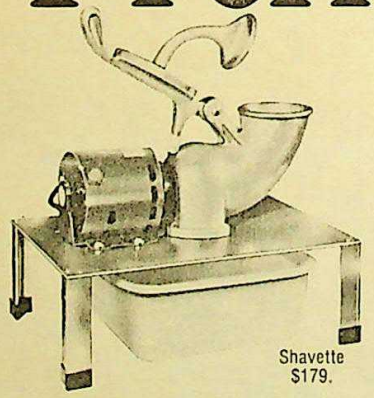


Gay 90's
4-Wheel Whiz-Bang
$1265.

With the proper popper cocktail lounges sell more liquor — often 35% more. Restaurants attract more customers — substantially more. School fund raisers earn more money, easier, more safely. Ice cream stores increase profits 20% — and more. It all depends on the proper popper — 43 models to choose from!

FOODSERVICE EQUIPMENT DEALER JANUARY, 1977 P. 22

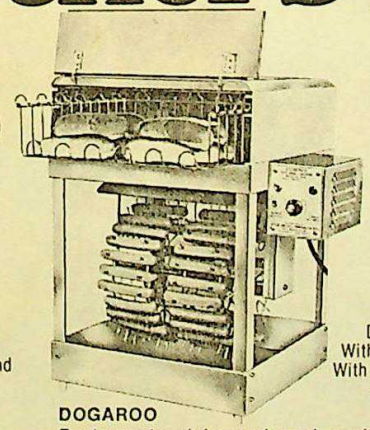
Profit Partners


Shavette
$179.

SNOW ICE COCKTAILS
For restaurants and cocktail lounges — exotic snow ice drinks made easy with the super dependable Shavette Ice Shaver. Shaves 10 lbs. of cubes into superfine snow in just 60 seconds.

X-15 Whirlwind
$579.

COTTON CANDY
The cotton candy machine the professionals use. Sturdy, dependable, and economical. A 75% profit snack for your customer and highly profitable for you.


DOGAROO
With Spike $345
With Cradle Wheel
$357.50

DOGAROO
Restaurants, clubs, and vendors all sell America's favorite sandwich. The Dogaroo from Gold Medal — the only easy-to-clean hot dog unit.

Go with the pro's — go Gold Medal, the nation's leading producer of snack food equipment. Go with the profit partners — the most complete line, the pre-sold line. Write today for catalog and complete details.

GOLD MEDAL PRODUCTS CO.
1834 FREEMAN AVE., CINCINNATI, OHIO 45214 513/381-1313

For information circle **22**

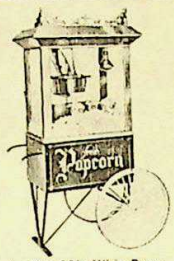
D7/325

FOODSERVICE EQUIPMENT DEALER, MARCH, 1976, P. 32

You get more from Gold Medal Poppers and your customers

Versatility

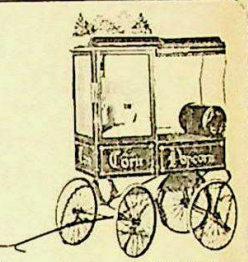
Twenty models to choose from . . . one ideal for any installation . . . any decor. From the sturdy, universal Whiz Bang (B) to the Antique Citation (C) for lounges, ice cream, or retail shopping areas — all built to sell more popcorn.



A. Gay 90's Whiz Bang
$930.00

B. Whiz Bang
$539.95

C. Antique Citation
$1395.00



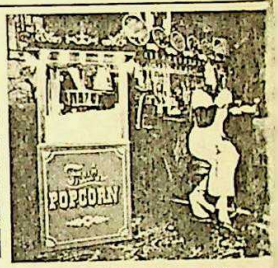
D. Antique Wagon
$3345.00

Profitability

Foodservice equipment dealers are now discovering the great potential for popcorn popper sales. Schools, clubs, restaurants, lounges, ice cream and snack bars, hotels, motels, hospitals — all logical prospects — but only if you sell the proper (Gold Medal) popper.

$3500 annual popcorn profit — Aiken High School store

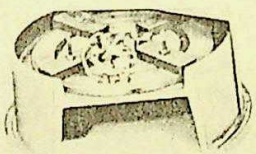
$1500 monthly popcorn profit — restaurant cashier counter



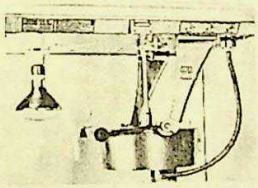
Drink sales up 45% — Spaghetti Emporium

Dependability

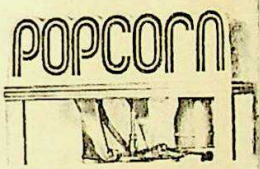
Gold Medal poppers make better popcorn; are safer to operate; sell more popcorn and make more profit. Gold Medal . . . the poppers professionals use.



Pancake type heating elements give even heat distribution to every kernel of corn — ensuring maximum popping expansion, maximum tenderness, maximum sales.



Double-hung twin-arm kettle suspension eliminates dangerous oil spills. Makes popping easy, fast, and safe.



Designed to sell popcorn. Sculptured reinforced fiberglas domes attract more customers, sell more popcorn.

Salesability

Gold Medal helps you by pre-selling the proper popper in over 100 publications with combined circulation of millions. 25,000 active leads go immediately to stocking distributors — leading to the proper popper sale — and often to other snack equipment sales too!

Gold Medal . . . the nation's leading manufacturer of popcorn, hot-dog, SnoKone and cotton candy equipment. Help your customers get the proper equipment . . . the units which do the job better, safer, more profitably, and for many more years. Write for information today. Go with the pro's . . . go Gold Medal.

Sell the Proper Poppe

GOLD MEDAL PRODUCTS CO

1834 FREEMAN AVE. • CINCINNATI, OHIO 45214 • 513/381-1313

For information circle 32

D 7/325

Sell the Proper Popper!

P·26 FEB., 1976

FOODSERVICE EQUIPMENT DEALER

Do you take orders or do you sell the proper popcorn popper? Here are 5 of our 20 models.

A.

B.

A. **GAY 90's WHIZ BANG** $880. List
Ideal for small cocktail lounges or for "extra" stand in busy spot.

B. **ANTIQUE CITATION** $1395. List
Better for bigger taverns. Built in popping oil system. Often saves over $300 in oil costs per year.

C. **CORNADO** $795. List
Perfect electric unit for high production needs — almost 500 quarts popped per hour.

D. **WHIZ BANG** $499. List
Easier, safer, longer life machine. Special heat elements produce better popcorn. Others from $399.

E. **ASTRO POP** $895. to $1995. List
Classy poppers — sells more popcorn. Floor models, too.

Yes, sell the proper popper . . . Gold Medal Machines are the ones which . . .

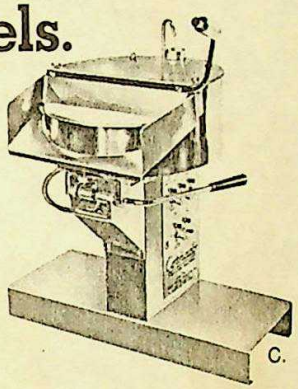
. . . help cocktail lounges sell more liquor — often 35% more
. . . help school fund raisers earn more money, easier, and more safely
. . . help ice cream stores increase profit 20% or more
. . . help stores and snack bars attract more customers.

PRE-SELLING HELPS YOU

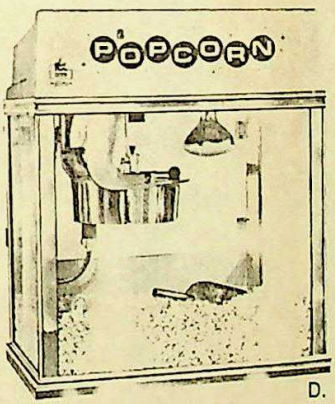
Most of your "accidental sales" are generated by Gold Medal ads in over 100 publications. Thousands of sales producing leads go directly to stocking distributors.
Help your customers get the proper popper . . . the unit which does the job better, safer, and for many more years.

Write Today!

GO WITH THE PRO'S . . . GO GOLD MEDAL



C.



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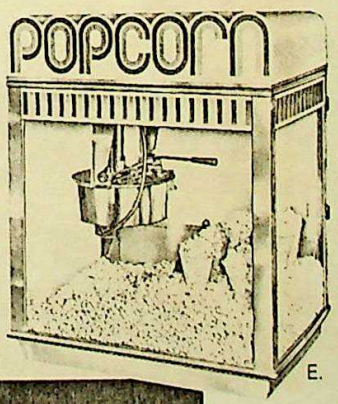


E.

GOLD MEDAL PRODUCTS CO.
1834 Freeman Ave., Cincinnati, Ohio 45214

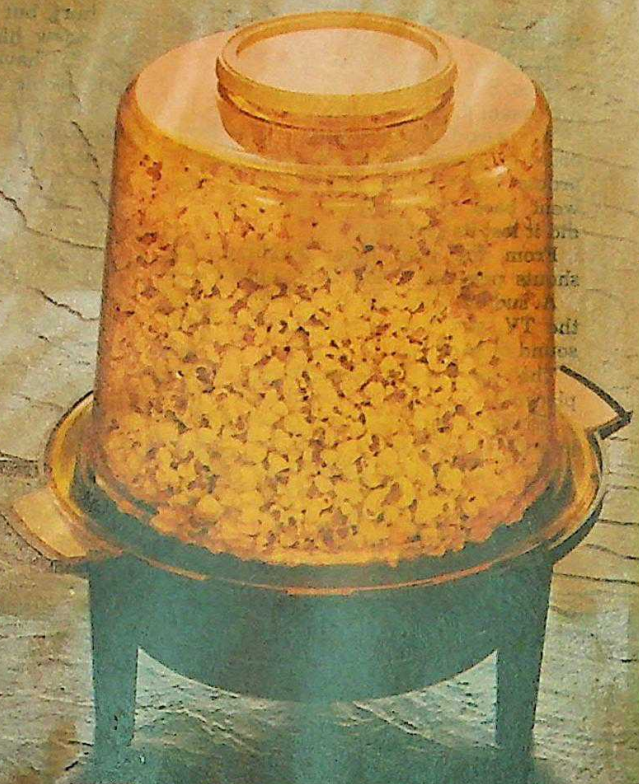
For information circle **26**

D7/94
325

OCT. 1973
p. 161

GOOD HOUSEKEEPING OCT. 1973 p. 161

A corn popper that butters better.



The West Bend Butter-matic.™

A lot of companies have tried to make a corn popper that butters but we honestly don't believe anyone's come up with a system as effective as our Butter-matic.

The method is beautifully simple. Get the corn popping first. Then add butter from the top. Heat from the popping corn gradually melts butter so all the popcorn gets a light, even coating. There's never any burning. Or soaking.

And you can serve right out of the cover. Just flip it over and start munching!

YOUR FIRST BATCH IS ON WEST BEND!

Buy your Butter-matic now. It comes with a free sample of Orville Redenbacher's® gourmet popping corn. (A better popcorn popper deserves a better popcorn!)

WEST BEND®

© 1973, The West Bend Company, Dept. 79B West Bend, Wisconsin 53095. Also available in Canada.

. . . where craftsmen still care